

In the Abstract

Please replace the Abstract as presented in the underlying International Application No. PCT/EP2003/009914, with the following amended Abstract:

ABSTRACT

The invention relates to a method for processing a moving workpiece (1), in particular a vehicle body (1) which is moved using means of a conveyor belt (10). For this purpose, a processing tool (5) is used which is attached to the hand (12) of a robot (7) and comprises a sensor system (18) which is permanently connected to the processing tool (5) and has at least one sensor (19). During the processing, the processing tool (5) follows the moving workpiece. This following movement is based on a closed-loop control process in which the processing tool (5) is oriented periodically towards reference areas (9) of the moving workpiece (1) using measured data of the sensor system (18). The measured data of the sensor system (18) is compared with setpoint data which is generated within the scope of a set up phase (I) of the processing tool (5), and a movement vector of the processing tool (5) is calculated from the difference between the measured values and setpoint data using a Jacobi matrix calculated within the scope of the set up phase, the processing tool (5) being moved by an amount equal to said movement vector. This process is repeated in a control loop.

(Figure 2a)